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4t Work

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Meeting challenges, 24/7.

After two days of preliminary work, Utilities crews began the Princess Anne Road main repair at 10 pm on November 20. The Utilities Department completed the repair 4 am and greatly reduced the number of customers that could have been affected by the break.

While customers sleep, Utilities crews ensure water service

Customer service is the number one consideration for the Department of Utilities. The department's employees often receive compliments from residential customers about the efficient, professional manner in which they make repairs and restore essential water services.

Utilities also delivers unparalleled service to its larger customers, like hospitals and schools, and the hundreds, if not thousands of patients, employees and students within their walls. When these large iobs are completed with little or no interruption of service, very few

customers notice, and that's the way it should be.

Such was the case of a three-day water main repair on Princess Anne Road in mid-November.

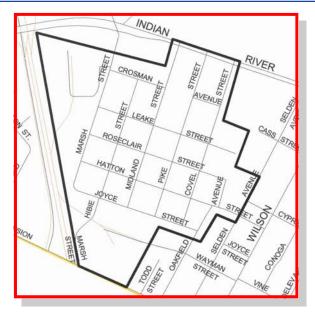
The repair was wrought with challenges:

- The main was old, circa 1903;
- The repair operation could affect the water service to a widespread area, which included Sentara Norfolk General Hospital complex, the Downtown Norfolk area. Booker T. Washington High School and the Chesterfield Heights water tank, which serves

- the South Norfolk area of Chesapeake;
- Utilities needed to make sure the customers maintained good water pressure while the the repair was being made, especially the hospital which needs water pressure for dialysis and surgical units.

A break in the bypass of the 30-inch main required shutting down a number of water valves which fed into it. Unfortunately, shutting down those valves would lower the water pressure to the areas they serve.

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Utilities CIP Update

Campostella Water and Sewer Upgrade, Phase II

Improvement of drinking water and wastewater services to Norfolk customers is continuing through the Campostella Water and Sewer Upgrade Phase II.

This project will include the replacement of water and sewer mains dating to the 1910-to-1920 timeframe. The new mains will serve about 200 residences in the area outlined on the map to the left.

The design phase of the project is nearly complete, and construction is expected to begin in fall 2004.◆

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"In order to make the repair, we had to secure a good shutdown of the water main," said Eric Tucker, Utilities Operations Manager.

For three days, Water Distribution crews located the valves necessary for the shutdown and made sure they were operational. There was a total of 14 valves in an area of about 1 1/2 square miles.

After all the valves were located, Utilities held a trial shutdown, allowing the crews to put a temporary plug in the break. When they restored the water so customers would have service, the plug blew out.

That was a minor set back, but it was remedied long enough to schedule the final repair for the next night. The trial also proved that some of the valves could remain open during the repair. The major customers would not experience low water pressure. During the repair, however, Booker T. Washington High School would be without water.

The repair was scheduled for 10 pm the next night, a time chosen to reduce the inconvenience to customers and limit the high school's service interruption to after-school hours. Crews had begun shutting valves down before the scheduled repair time, and they fully expected to have the main shut down again within two hours.

At 12:30 am, there was still some flow of water into the 30-inch main, delaying the repair, and the crews could not find the valve that was still on. If the water pressure had to be reduced to the downtown area, there would be little problem, since most of the restaurants would be closed. And since it was 12:30 am, when most people are sleeping, there would be little disruption to the routines of the South Norfolk customers.

However, if the hospital lost water pressure, it would need to bring in extra staff to operate manual pumps if they were needed while the water pressure was low.

But, if there was a solution to this, the Utilities crews were determined to find it.

"One crew found a valve on Church Street that was not on our drawings," Tucker said. "When they shut that valve down, we did not have to shut the water off to our main customers."

The repair was made within two hours, as originally predicted. But, the pipe required specially-made flanges to seal the repair. The flanges had been made prior to the repair, but there was a leak on one flange nipple which had to be repaired by a welder.

By 4 am, the repair was made, all the valves turned back on, and Booker T. Washington High School's water was restored before the first class period.

"The Water Distribution crews gave a tremendous effort to this and were not going to be satisfied until that main was shut down and the repair made," Tucker said. "It was a challenge, and they met it."

During these three days in November, right before the Holidays in the City Parade and one week before Thanksgiving, Department of Utilities crews averted what could have been a major water service interruption and inconvenience for many Norfolk customers.

On the morning of November 20, the hospital and downtown businesses kept providing services, the South Norfolk residents never lost water, and Booker T. Washington High School opened with cafeteria, locker rooms, science labs, lavatories and water fountains fully operational. And the general population of Norfolk never even knew about it.

That's the way it's supposed to be. ◆